



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/765,133	01/28/2004	Stanislas Bourdeaut	Q79492	3585
23373 7590 01/22/2010 SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037				
EXAMINER				
BRANDT, CHRISTOPHER M				
ART UNIT		PAPER NUMBER		
2617				
NOTIFICATION DATE		DELIVERY MODE		
01/22/2010		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

sughrue@sughrue.com  
PPROCESSING@SUGHRUE.COM  
USPTO@SUGHRUE.COM

### Office Action Summary

**Application No.**

10/765,133

**Applicant(s)**

BOURDEAUT, STANISLAS

**Examiner**

CHRISTOPHER M. BRANDT

**Art Unit**

2617

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 October 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 4-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 4-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 January 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Amendment***

This Action is in response to applicant's amendment/arguments filed October 13, 2009.

**Claims 1 and 4-11** are still currently pending in the present application.

***Response to Arguments***

Applicant's arguments filed October 13, 2009 have been fully considered but they are not persuasive.

With regard to applicant's argument that Leppisaari is misplaced and does not render the claimed invention obvious over the applied references, alone or in combination, the examiner respectfully disagrees. The examiner maintains his rejection and position regarding the Leppisaari reference. The examiner has reproduced his previous response to arguments herein below.

Hunzinger teaches different transfer modes when Hunzinger is discussing different data rates (paragraph 109). Leppisaari teaches that the invention is suitable for use in EGPRS (Enhanced GPRS), which is built on GPRS (page 12 lines 36-38). The examiner states that Leppisaari discloses that the network can receive the packet channel request sent by the wireless terminal, which comprises the bit pattern, where the bit pattern (i.e. 110101) contains the sequence number (in this case 1) and the received block bitmap (page 9 lines 7-29). As noted in the previous Office Action, this feature is taken directly from the 3GPP Technical Specification TS 44.060, however, Leppisaari also shows this feature with the example given on page 9 lines 7-14 (also see figures 4a and 4b). Therefore, Leppisaari discloses the limitation, "a start

sequence number (SSN) and a received block bitmap (RRB) in acknowledgement/non-acknowledgment (ACK/NACK) messages.”

Lastly, Leppisaari explicitly teaches operating in an unacknowledged RLC mode (page 10 lines 34-36) as is explicitly recited in the current claims.

As a result, the argued features are written such that they read upon the cited references.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 1 and 9-11** are rejected under 35 USC 102(b) as being anticipated by **Leppisaari et al. (WO 01/20924 A1)**.

Consider **claim 10**. Leppisaari discloses a mobile station comprising:

a radio link control (RLC) transmitter which receives acknowledgement/non-acknowledgement (ACK/NACK) messages transmitted by an RLC receiver, said messages comprising a start sequence number (SSN) and a received block bitmap (RRB); and means for, in a transfer mode corresponding to Enhanced General Packet Radio Service (EGPRS), taking into account SSN and RRB information transmitted in a non-acknowledged mode (figure 4a and 4b, page 9 lines 7-14, page 10 line 26 – page 11 line 12, read as a wireless terminal can send resource requests and receives responses, wherein these packets include bit patterns (i.e. 110101), which in this case has a sequence number of 1. It is also noted that this is taken directly from the 3GPP Technical Specification TS 44.060).

Consider **claim 11 (and similarly applied to claim 1)**. Leppisaari discloses a mobile communication network equipment comprising:

a radio link control (RLC) transmitter which receives acknowledgment/non-acknowledgement (ACK/NACK) messages transmitted by an RLC receiver, said messages comprising a start sequence number (SSN) and a received block bitmap (RRB); and means for, in a transfer mode corresponding to Enhanced General Packet Radio Service (EGPRS), taking into account SSN and RRB information transmitted in a non-acknowledged mode (figure 4a and 4b, page 9 lines 7-14, page 10 line 26 – page 11 line 12, read as the network can receives resource requests and sends responses, wherein these packets include bit patterns (i.e. 110101), which in this case has a sequence number of 1. It is also noted that this is taken directly from the 3GPP Technical Specification TS 44.060).

Consider **claim 9 and as applied to claim 1**. Hunzinger and Leppisaari disclose wherein the non-acknowledged mode is General Packet Radio Service (GPRS) mode or Temporary Block Flow (TBF) Mode (page 10 lines 30-36).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**Claims 4 and 6-8** are rejected under 35 USC 103(a) as being unpatentable over **Leppisaari et al. (WO 01/20924 A1, hereinafter Leppisaari)** in view of **Hunzinger et al. (US PGPUB 2002/0172192 A1, hereinafter Hunzinger)**.

Consider **claim 4 and as applied to claim 1**. Leppisaari discloses the claimed invention but fails to explicitly teach a method wherein said acknowledgment information is taken into account by an RLC sender to estimate transmission quality.

However, Hunzinger teaches a method wherein said acknowledgment information is taken into account by an RLC sender to estimate transmission quality (paragraph 58).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the teachings of Hunzinger into the invention of Leppisaari in order to significantly reduce retransmission, thus increasing the efficiency of network resources.

Consider **claims 6-8 and as applied to claim 1**. Leppisaari discloses the claimed invention but fails to explicitly teach a mobile station, mobile radio system equipment, and a mobile radio system including means for implementing a method according to claim 1.

However, Hunzinger teaches a mobile station, mobile radio system equipment, and a mobile radio system including means for implementing a method according to claim 1 (Hunzinger; paragraph 9).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the teachings of Hunzinger into the invention of Leppisaari in order to significantly reduce retransmission, thus increasing the efficiency of network resources.

**Claim 5** is rejected under 35 USC 103(a) as being unpatentable over **Leppisaari et al.** (WO 01/20924 A1, hereinafter **Leppisaari**) in view of **Hunzinger et al.** (US PGPUB 2002/0172192 A1, hereinafter **Hunzinger**) and further in view of **Balachandran et al.** (US Patent 6,567,375 B2, hereinafter **Balachandran**).

Consider **claim 5 and as applied to claim 4**. Leppisaari and Hunzinger disclose the claimed invention except they fail to explicitly mention wherein said transmission quality estimate is used for radio link adaptation.

However, Balachandran disclose wherein said transmission quality estimate is used for radio link adaptation (column 3 lines 48-59).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the teachings of Balachandran into the methods of Leppisaari and Hunzinger in order to be able to test the radio link and then help provide the improvements.

**Conclusion**

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any response to this Office Action should be **faxed to (571) 273-8300 or mailed to:**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**Hand-delivered responses** should be brought to

Customer Service Window  
Randolph Building  
401 Dulany Street  
  
Alexandria, VA 22314



Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher M. Brandt whose telephone number is (571) 270-1098.

The examiner can normally be reached on 7:30a.m. to 5p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on (571) 272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

/Christopher M Brandt/  
Examiner, Art Unit 2617  
January 15, 2010

/George Eng/  
Supervisory Patent Examiner, Art Unit 2617